

Application No. : 09/706,965
Amdt. Dated : January 8, 2004
Reply To Office Action Of : October 10, 2003

REMARKS

The Applicants thank the Examiner for his careful and thoughtful examination of the present application. By way of summary, Claims 1 and 12-15 were pending in this application. In the present amendment, the Applicants have amended Claim 1 and added new Claims 16-24. Accordingly, Claims 1 and 12-24 are pending for consideration.

Rejection of Claims 1 and 12-15

The Office Action rejected Claim 1 under 35 U.S.C. § 102(e) as being anticipated by U.S. patent no. 5,372,135, issued to Mendelson et al., (the Mendelson patent). The Applicants respectfully traverse this rejection because the Mendelson patent fails to identically teach every element of the claim. See M.P.E.P. § 2131 (stating that in order to anticipate a claim, a prior art reference must identically teach every element of the claim).

The claims recite systems that use an active change in blood volume to improve the signal processing in a physiological monitor. The systems also reduce effects of the inducement device that provides the change, such as, for example, the destructive effect the device may have on the optical path length at a measurement site. Thus, the claims recite various systems that advantageously reduce the effects of optical scattering based on a changing path length, while still employing the advantages associated with inducing a change in the blood volume.

For example, Claim 1 recites:

A system ... comprising:
a light source ...;
an active pulse inducement device which causes a periodic change in a volume of blood in the fleshy medium with the level of inducement below a level that causes significant variations in the optical properties of the fleshy medium;
an optical detector ...; and
a signal processor

In contrast, the Mendelson reference fails to disclose any such minimal movement of the flesh in the test region. Movement of the fleshy medium in the test area can cause changes in the optical path length of the medium, resulting in optical scattering and other

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sources of noise that can distort the signals due to changes in fluid volume flow. The advantage of reducing this movement in the test area is that it correspondingly reduces the noise in the detected signal by isolating the variations due to varying fluid volume flow. Movement can be reduced by inducing the pulse at a location distal from the area receiving the incident light and by using gentle pressure. Mendelson disregards the important considerations above and the deleterious effects of causing excess changes in the optical path length of the fleshy medium.

Thus, the Applicants respectfully submit that Mendelson fails to identically teach every element of Claim 1. Accordingly, the Applicants request withdrawal of the rejection of Claim 1.

Claims 12-15, which depend from Claim 1, are believed to be patentable for the same reasons articulated above with respect to Claim 1, and because of the additional features recited therein.

New Claims

New Claims 16-24 have been added to more fully define the Applicant's invention and are believed to be fully distinguished over the prior art of record.

Request For Telephone Interview

In view of the forgoing, the present application is believed to be in condition for allowance, and such allowance is respectfully requested. If further issues remain to be resolved, the Applicants' undersigned attorney of record hereby formally requests a telephone interview with the Examiner. The Applicants' attorney can be reached at (949) 721-2946 or at the number listed below.

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In addition, please charge any additional fees, including any fees for additional extension of time, or credit overpayment to Deposit Account No. 11-1410.

Respectfully submitted,

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Dated: January 8, 2004

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